K. K. Wagh Institute of Engineering Education & Research, Nashik
(An Autonomous Institute From A.Y. 2022-23)

InSem Examination-IISummer2025	
Exam Seat No.:	
Academic Year:2024-2025	Semester:VI
Class:TY	Program:B.Tech
Branch Code:ETC	Pattern:2022
Name of Course: FPGA Based System Design	Course Code: ETC223015 (B)
Max. Marks:30	Duration:1.15 Hrs.

Instructions: Candidates should read carefully the instructions printed on the Question Paper
and on the cover page of the Answer Book, which is provided for their use.

    1. This question paper contains 1 page(s).
    2. Answer to each new question is to be started on a new page.
    3. Assume suitable data wherever required, but justify it.
    4. Draw the neat labelled diagrams, wherever necessary.
    5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

	Marks	**CO**

Question No. 1

1 a)	Compare FPGA with Microprocessor	(7)	CO1

Question No. 2

2 a)	Classify PLDs, Classify FPGAs based on architecture and explain Glue Logic	(8)	CO1

<div align="center">OR</div>

2 b)	What is Moore's Law? Explain the importance of figure of merit of an IC manufacturing line with example	(8)	CO1

Question No. 3

3 a)	What is CMOS Technology? Explain the advantages of CMOS over other logic families	(7)	CO2

Question No. 4

4 a)	Explain with diagrams steps involved in IC manufacturing	(8)	CO2

<div align="center">OR</div>

4 b)	What are stick diagrams? Explain with example	(8)	CO2

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